

Notice of Allowability

Application No.

09/976,274

Examiner

Jin-Cheng Wang

Applicant(s)

PARK, HYUN-SOO

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/6/2006.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance of claims 1-5 in the amendment of 2/6/2006: Nothing in the prior art anticipates or suggests, "an outputting unit directly connected to said digital to analog converter and directly connected to said signal dispensing unit of said personal computer" in an apparatus for processing a signal, comprising: a signal dispensing unit dispensing a first personal computer signal output from a personal computer in the form of a first analog signal directly from said personal computer; an analog to digital converter converting the first analog signal from said signal dispensing unit of said personal computer to a first digital signal of said personal computer; a signal processing unit performing picture-in-picture signal processing enabling one of the first digital personal computer signal dispensed by said signal dispensing unit through said analog to digital converter and a decoded second signal as a second digital signal input from an outside source to be displayed on a main screen and the other to be displayed on at least one sub-screen, and said signal processing unit processing said second digital signal to be displayed alone on said main screen, said second digital signal being any one of a television signal and a video signal; a digital to analog converter converting a digital output signal of said signal processing unit into a second analog signal; an outputting unit directly connected to said digital to analog converter and directly connected to said signal dispensing unit of said personal computer, receiving said first analog signal from said signal dispensing unit and said second analog signal from said digital to analog converter converting said digital output signal from said signal processing unit, outputting the first analog signal dispensed from said signal dispensing unit in response to a control signal for displaying only the first personal computer signal, and outputting said second analog signal

Art Unit: 2628

from said digital output signal of said signal processing unit in response to a control signal for displaying the first personal computer signal and said second signal in picture-in-picture format; and a monitor amplifying the signal output from said outputting unit to be displayed.

2. The cited references Cheney et al. U.S. Pat. No. 6,519,283 (hereinafter Cheney '283) and Cheney et al. U.S. Patent No. 6,469,743 (hereinafter Cheney '743) failed to teach a direct connection between an outputting unit and the signal dispensing unit of the personal computer. For example, Cheney '283 discloses signal dispensing unit dispensing a first personal computer signal output from a personal computer in the form of a first analog signal directly from said personal computer wherein Cheney discloses that the uncompressed analog video can be derived from a computer with TV output and therefore, the computer has a signal-dispensing unit dispensing a computer output signal in the form of a first analog signal. Cheney discloses an analog to digital converter converting the first analog signal from said signal dispensing unit of said personal computer to a first digital signal of said personal computer wherein Cheney discloses that an EGV including the video decoder receives an uncompressed signal is received from a second video source and may either comprise another analog signal wherein Cheney '283 discloses that the uncompressed analog video signal can be derived from a computer with TV output. The video decoder performs an analog to digital conversion. Cheney '283 further discloses a DMSD 105 digitizing the analog signal for input to the integrated digital video decode system 100 and therefore DMSD 105 performs an analog to digital conversion of the first analog signal. Cheney discloses signal processing unit performing picture-in-picture signal processing enabling one of the first digital personal computer signal dispensed by said signal dispensing unit through said analog to digital converter. Cheney further discloses a decoded

Art Unit: 2628

second signal as a second digital signal input from an outside source in which the decoded signal 101 from a first video source such as a cable or satellite source to be displayed on a main screen and the other to be displayed on at least one sub-screen in which "the other picture" is described in Cheney '283 as is the digital signal from the DMSD 105 or EGV port. Cheney further discloses a signal processing unit processing said second digital signal to be displayed alone on said main screen, said second digital signal being any one of a television signal and a video signal wherein the video decode system 100 processing the signal from the EGV port or DMSD 105 which is the uncompressed signal received from a second video source and may either comprise another digital signal or an analog signal. Cheney discloses digital to analog converter converting a digital output signal of said signal processing unit into a second analog signal. Cheney discloses an encoder DENC macro for encoding the merged picture-in-picture video stream including both the decompressed digital video and the uncompressed video to television format and therefore DENC encoding a digital output signal of the video decode system 100 into an analog signal to be output to a television. Cheney discloses that the host processor can set the pixel select control to (1) forward the decompressed video on to display; (2) forward the uncompressed video on to display or (3) support picture-in-picture display, dynamically selecting both the decompressed and uncompressed video for display. In mode (3), switching between decompressed and uncompressed video for simultaneous display is done at a rate according to the desired location of the secondary picture 72). Finally Cheney discloses a monitor amplifying (A TV monitor automatically amplifying the signal to be displayed) said signal output from the outputting unit to be displayed. However, Cheney '283 failed to teach an outputting unit directly connected to said signal dispensing unit of said personal computer.

Art Unit: 2628

3. The following is an examiner's statement of reasons for allowance of claims 6-9 in the amendment of 2/6/2006: Nothing in the prior art anticipates or suggests, "outputting from said switching unit, said first analog signal directly from said personal computer signal generated from the step of dispensing an output signal in response to a control signal for displaying only said first analog signal from said personal computer" in a method for processing a signal comprising a plurality of steps as recited in the claim 6. The reasons for allowance are similarly drawn from those set forth in the claims 1-5.

4. The following is an examiner's statement of reasons for allowance of claims 10-15 in the amendment of 2/6/2006: Nothing in the prior art anticipates or suggests, "an outputting unit outputting the original first analog signal generated from and sent directly from said personal computer signal dispensed from said signal dispensing unit" in an apparatus for processing a signal comprising a plurality of elements set forth in the claim 10. The reasons for allowance are similarly drawn from those set forth in the claims 1-5.

5. The following is an examiner's statement of reasons for allowance of claims 16-20 in the amendment of 2/6/2006: Nothing in the prior art anticipates or suggests, "a signal dispensing unit dispensing an original first analog signal output from a personal computer to a switching unit and to a first converter unit" in an apparatus for processing a signal comprising a plurality of elements set forth in the claim 16. The reasons for allowance are similarly drawn from those set forth in the claims 1-5.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

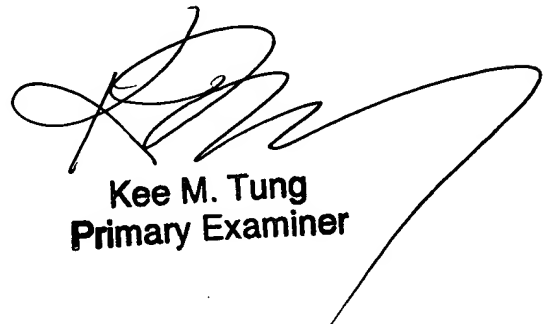
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665.

The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcw



Kee M. Tung
Primary Examiner